

BDCOM WBR55G-50P

Overview

BDCOM WBR55G-50P is a high-performance outdoor CPE designed for P2P/P2MP connectivity. It complies with IEEE 802.11 Wi-Fi standards and equipped with a built-in dual-polarized high-gain antenna, it delivers reliable wireless bridging over long distances.

WBR55G-50P features a watchdog mechanism for automatic recovery during network disruptions, along with remote management capabilities. Administrators can monitor real-time status, perform firmware upgrades, and initiate reboots from anywhere.

Ideal for long-range wireless backhaul and point-to-multipoint deployments, WBR55G-50P combines high throughput, carrier-grade reliability with efficient maintenance for harsh outdoor environments.



Key Features

- Support WiFi5 standard and 5GHz band
- Up to 867Mbps speed
- 2 Gigabit Ethernet ports
- Support 48V POE output
- More than 5KM distance

H/W Specification

Model	BDCOM WBR55G-50P
Chipset	QCA9563+QCA9886+QCA8337
Flash	SPI NOR 16MB
DDR	DDR2 128MB
WiFi Frequency	5.150~5.850GHz
WiFi Protocol	802.11 a/n/ac/wave2
Max rate	867Mbps
Antenna	Internal 15dBi directional panel antenna

TX Power	802.11a	54M	21±2dBm	6M	25±2dBm
	802.11n HT20	MCS7	21±2dBm	MCS0	25±2dBm
	802.11n HT40	MCS7	21±2dBm	MCS0	25±2dBm
	802.11ac VHT20	MCS9	20±2dBm	MCS0	25±2dBm
	802.11ac VHT40	MCS9	19±2dBm	MCS0	25±2dBm
	802.11ac VHT80	MCS9	19±2dBm	MCS0	25±2dBm
Recv Sensitivity	802.11a	54M	-73dBm	6M	-90dBm
	802.11n HT20	MCS7	-71dBm	MCS0	-89dBm
	802.11n HT40	MCS7	-68dBm	MCS0	-86dBm
	802.11ac VHT20	MCS9	-64dBm	MCS0	-87dBm
	802.11ac VHT40	MCS9	-59dBm	MCS0	-84dBm
	802.11ac VHT80	MCS9	-56dBm	MCS0	-81dBm
EVM	802.11a 54M: ≤-25 dB 802.11n MCS7: ≤-28 dB 802.11ac MCS9: ≤-32dB				
PPM	±20ppm				
WAN	1*10/100/1000M WAN (POE Inout)				
LAN	3*10/100/1000M LAN (POE Output)				
Power	PoE 48V or DC 48V Max≤12W				
Reset	Press 1 seconds for Pairing Press 10 seconds for Factory resetting				
button	Set Master / Slave mode				
Indicators	SYS, WAN, LAN, WIFI, Signal*4				
Dimension	190×110×50mm				
Weight	280g				
Temperature	Working: -30~55°C Storage: -40~70°C				
Humidity	5~95% (Non-Condensing)				
Protection	IP65				
ESD	Air: ±8KV Touch: ±6KV				
Electrical Surge	Common Mode: 2KV Differential Mode: 1KV				

S/W Specification

Operating mode	<ul style="list-style-type: none"> · AP mode · Relay mode
Wireless	<ul style="list-style-type: none"> · Multi SSID (Max: 4) and Hidden SSID · Transmit Power Setting · Scheduled WiFi On/Off
Wireless Safety	<ul style="list-style-type: none"> · WPA/WPA-PSK · WPA2/WPA2-PSK · MAC ACL with Whitelist · Max client limit (Max: 64) · User isolation
IP Networks	<ul style="list-style-type: none"> · Static IP, DHCP client · 802.1Q VLAN · IPv4 & IPv6 · DHCPd, SNMP, NTP client
Management	<ul style="list-style-type: none"> · SSH, Telnet · Http/Https · SNMP read · Route tracking · Ping watchdog

Antenna Specification

Working Frequency	5180~5850 MHz
Gain	15dBi
Polarization mode	Vertical/horizontal dual polarization
VSWR	<1.8
Beam angle	Horizon: 30° / Vertical: 30°